

## **REMARKS**

This application has been reviewed in light of the Office Action mailed October 14, 2005. Reconsideration of this application in view of the below remarks is respectfully requested. Claims 1-20 are pending in the application with Claims 1 and 15-18 being in independent form. By the present amendment, Claims 1 and 15-18 have been amended. No new subject matter has been introduced by way of the present amendment.

### **I. Rejection of Claims 1-16 and 18-20 under 35 U.S.C. § 103(a)**

Claims 1-16 and 18-20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentably obvious over Japanese Patent No. 07-163162 issued to Funakubo et al. in view of U.S. Patent No. 6,064,140 issued to Zumeris.

Funakubo '162 is directed towards a stacked piezoelectric oscillator and Zumeris discloses a single ceramic (piezoelectric) element acting as a motor. Therefore, there is no motivation or suggestion to combine the two references because those skilled in the art would not look to combine the single ceramic motor of Zumaris with the stacked piezoelectric oscillator of Funakubo '162.

Specifically, since Zumaris discloses a single ceramic element there is no internal electrodes needing to be connected by outer electrodes and thus the printed circuit technique as disclosed in Zumaris is not applicable to the electrode structure as shown in Funakubo '162, in which outer electrodes are connected together.

Additionally, the electrodes of Zumaris, broadly interpreted, can be argued to be equivalent to Applicant's internal electrodes, thus Zumaris may disclose connecting internal electrodes together using a printed circuit technique. Connecting electrodes of each of the piezoelectric elements using conducting films with any printed circuit technique, in the manner

disclosed by Zumeris and shown in FIG. 1A, would result in two large electrodes being formed from the four smaller ones on each piezoelectric element. Combining Zumaris with Funakubo '162 would then at most obviously yield multiple piezoelectric elements having internal electrodes connected as described above and stacked as shown in Funakubo '162. However, this combination would not produce a structure similar to that recited in Applicant's Claims, nor a similar function.

Further, since all four electrodes are positioned on the same surface, it is not necessary to extend the conducting films to any surface other than the surface with the electrodes. Furthermore, the surface opposite the surface containing the electrodes is disposed as a ground, thus the four electrodes disclosed in Zumeris cannot be rearranged such that electrodes would be positioned on different surfaces.

One skilled in the art would not find in Zumeris any suggestion of having at least one conducting film connecting predetermined outer electrodes of the first outer-electrode group and the second outer-electrode group via a face of the ultrasonic transducer other than faces whereon the predetermined outer electrodes are formed, as recited in Claims 1, and 15-16 and 18.

Therefore, Claims 1-16 and 18-20 are believed to be patentably distinct and allowable over the cited prior art references. Accordingly, Applicant respectfully requests withdrawal of the rejection with respect to Claims 1-16 and 18-20 under 35 U.S.C. § 103(a) over Funakubo '162 in view of Zumeris.

## **II. Rejection of Claim 17 Under 35 U.S.C. §103(a)**

Claim 17 is rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,345,137 issued to Funakubo et al. in view of Zumeris. For the same reasons as above, Funakubo et al. and Zumeris, taken alone or in any proper combination, fail to disclose or suggest at least one

conducting film connecting predetermined outer electrodes of the first outer-electrode group and the second outer-electrode group via a face of the ultrasonic transducer other than faces whereon the predetermined outer electrodes are formed, as recited in Claim 17.

Therefore, Claim 17 is believed to be patentably distinct and allowable over the cited prior art references. Accordingly, Applicant respectfully requests withdrawal of the rejection with respect to Claim 17 under 35 U.S.C. § 103(a) over Funakubo et al. in view of Zumeris.

## CONCLUSIONS

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-20 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicant's undersigned attorney at the number indicated below.

Respectfully submitted,



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